School Learning

(a child centred perspective)

— a reference

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A Quotation

"..... a person is always the product of the sum of his impressions and it is absolutely impossible for him to cut out a period, or segment, as it were, of his life and go ahead. There is no break in the continuity of the psychic life."

– A.A. Brill in Basic Principles of Psychoanalysis (New York: Doubleday and Company, Inc., 1949), P.60.

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Preface

The present monograph has been brought out by its author for its use by the researchers, teachers and others who may be associated with such topics for their works.

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It is hoped that the contents of this monograph will be useful to its users. The interpretations expressed in this reference material are those of the author only. Reactions, if any, may be sent to the undersigned directly.

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1. Introduction

1.1 NEP(1986) and POA (1992) as guidelines

The National Educational Policy (1986) and the subsequent Ramamurthi Committee Report (1990) and publication of the revised Programme of Action (1992) by the Department of Education (Ministry of Human Resource Development, Govt. of India) have given full emphasis on child-centred approach to education in general and teaching-learning process in specific. The genesis however can be traced back to Rousseau's dream child Emili and plans for her education. But with the development of the overall conceptual and technological aspects throughout the twentieth century, many of the issues needed confrontation and change. For example, the etic-emic dilema (Davidson et.al. 1976) for cross-cultural variations, the socio-economic background, the scientific and technological barriers, can be counted for such necessities out through revisions.

Along with the above, it has been also mooted that day-by-day man is getting imprisoned in the technological cage which has increased his quantum of dependency motive on scientific and technological advances, e.g., human memory versus computer memory, [illegible] of psychological factors like, shifting of sense of responsibility, reduction in degree of self-dependence and self-strength, increase in the fear of failure and reduction in the hope of success, technological-

failures leading to conflict between scientific and technological attitude versus chaotic and unjust social thinking. The terms like 'elite' and 'poor' have got acquired further significance over technological culture. Further socio-psychological aspects like material versus spiritual values, realistic versus utopian ideas have all at the last decade of twentieth century converged upon the development of a modified concept of education and the teaching-learning process by again putting the child at the centre of the process.

2. Context for School Learning

School as a centre for learning is as old as the ancient civilization which developed around Indus, Euphretis and Tigris, Nile and such great rivers. Astronomy, caligraphy, leaf-writing, coins are representations of the early history of learning. In Mahabharata it is found that Abhimanyu had his first learning when he was in mother's womb.

Some important historical processes have been discussed below:

(1) The Indian Samkhya philosophy has formed learning as adhyayana and suggested six steps. They are acceptance, cognition, reasoning or critical examination, argument, formal discussion and knowledge of prakriti and purusa.

The pathsala, the tols and modern primary schools are for the beginners in school learning. These have

since ... all ... in some or other different forms.

(2) Systems approach, is one of the modern ideas where school learning ... been viewed as a part of a total education system. Skinner (1940) and Allport (1955) has given theoretical discussions on systems approach otherwise known as cybernetics. Some such models, flow-chart diagrams as procedures of systems approach, have been suggested by Allport (1954), Skinner(1968), Gagne (1968) and others. The systems approach can be serialized as input→transformation process→output evaluation discrepancy data→feedback→recycle→ input. Roy (1971, 1972) has elaborated the approach through the following model

Input	Transformation Process	Output
That which is transformed : Children	Education (School learning) through 1. Curriculum 2. Books 3. Teaching aids 4. Learning aids 5. Teacher behaviour 6. Teaching skill	Socialized, self-actualizing, skilled young adults

(3) Convival education as discussed by Illich (1973), in his book titled "De-schooling Society", is another pointer towards total learning approach as a whole. He had drawn a contrast between the usual education and school learning versus convival education as learning outside the school and their effectiveness for the process of life and living. He had drawn examples from USA and other countries as well to make a two-way classification of the left wing and right wing institutions for addicted education and formal education. The classifications have been given below :

Left-wing Institutions (for addicted education)	Right-wing Institutions (for formal education)
Convival institutions like sub-way lines, public book fairs, hand laundries, music teachers, hair dressers etc., which are unpredictable and spontaneous, self-activated, self-employed rich in personal encounters and free choice and foster self-help and a recognition of joy and beauty that man ought to experience.	Health care, agriculture, airline services, family life, churches, the military, large industry, the schools etc. which are manipulative, culturally reinforcing, bureaucratic, rigid and inclined to frustrate the search for alternative ways.

It has also been noticed that in case of left wing institutions there are no official learning material or school as such. This is mainly for the underground world, which seeks to have a [illegible] circle and a protomental system. Illich has virtually advocated left wing education or known as convival education as it helps in developing ego-strength and effectively direct non-bureaucratic defences for dealing with conflicting areas.

(4) Non-formal education and other systems of school learning situation is of recent origin. A trend report by Palsane and Rastogi (1987) and a publication of Government of India (1990) have given detailed accounts about this system. Broadly speaking, the NFE and few other systems like Anganwadi and Balwadi (0-3 years), Early Childhood Education Centres (ECEC) for children of 3-6 years, then NFE (6-14 years) and adult education centres (14-35 years), all constitute parts of the chain of another school learning system running parallel to the regular system from Class I to XII in regular schools.

The major objectives are, universalization of elementary education (6-14 years), literacy development, health, nutrition, creativity and environmental awareness. Vocational education through agricultural work, foundry work, office work etc. are also promoted. The special features include :

1. learner-centred approach
2. emphasis on learning rather than teaching
3. learners to progress at their own speed
4. scholastic achievements as for norms set by the formal system
5. participatory learning environment
6. extra-curriculur activities
7. facilities to girls, SC/ST students
8. continuous learner evaluation and certification.

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2. Approach to School Learning

2.1 School readiness.

The Programme of Action based with the National Policy of Education (1986) has described the present situation in the way that, "provision of free and compulsory education to all the children until they complete the age of 14 years, is a Directive Principle of the Constitution. "As such the NPE has given full emphasis on (1) universal enrolment and retention upto 14 years of age and (2) a substatial improvement in the quality of education. In view of these issues the NPE commended the child-centred approach to build the academic programme and school activities around the child. Unattractive school environment, unsatisfactory conditions of buildings and insufficiency of instructional

material, function as demotivating factors for children and their parents. As a result, school readiness involves a call for substantive improvements of school and support services.

In a review of the NPE (1986), under the Chairmanship of Ramamurthi (1990) the Committee in its report titled Towards and Enlightened and Humane Society, stated that the thrust areas could be (1) convergence of services (2) linkage between the school and the community (3)decentralised and participative mode of educational planning and management.

All these are necessary so that there will be good amount of readiness before the child goes to the school. Psychological preparation of the child for going to the school is highly essential. For example, the preparations may require reduction in the dependency motive, school phobia, adjustment with other children and the new environment etc. The pre-primary school system serves as the pre-school steps for making the child ready for the formal schooling. The home, the number of co-siblings, the attitude of the parents and their occupation serve as important variables.

Two such problems faced by the first time school goer have been discussed below .

a) Adjustment problems :

This is the first problem which may emerge as an important one. During early days the child remains in home, under the affectionate care of parents, senior co-siblings, grand-parents etc. If the school somehow fails to provide mother or father substitutes or affectionate substitute co-siblings, then smooth transfer of images of the parents and co-sibling's may not take place. Psychoanalytically speaking, psychological wearing from the parents and transference to the teachers has to take place in the child, so that there is sufficient reduction in the dependency motive in the child. Families having single child only may find that, more than necessary protection to the child have lead to pampering. As a result the ego-functioning of the child has become more parent-fixated leaving little scope for transference to other unknown adults like the teacher. In such situations, open dialogues with the child about the school and its necessities may be helpful. Sometimes, the peers in the school may provide diversions to the anxieties and tension in the child, by providing

free association, free-mixing, free-talking and so on. In fact, both the teacher and the peers in the school can always provide an emotional cusion or umbrella to the child to get rid of any possible adjustment problems.

However, adjustment problems do not appear as prolific in nature and content. Sometimes, a child or two of them show such problems, which can be taken up by the school psychologists or so. But, in any case, full precaution is necessary.

b) School phobia

As a consequence of the adjustment problems, if any, the child may grow school phobia and feel totally scared to go to the school. Fear of punishment, sarcastic remarks, pinching taunts may create school phobia. As symptoms, there may be depression, stomach upset, headache, anorexia, enurasis, nausea, lack of concentration, hysteric fits and loss of apetite. The child may not be able to get out of ambivalence, conflict, and confusion arising out of severs fear of failure and little hope of success. Fear of failure may overtake all others

and create the school phobia. Isolated physical beating or mental torture should be avoided so that the first time school goer does not get into unwanted school phobia and lastly becomes a school drop out if not mentally ill.

2.2 Characteristics of a child learner

It has already been established that the world of the child starts as blooming-buzzing-confusion. In an attempt to bring the child out of such a mental state, educationists have found out a programme of action by making the child a learner in that process. With the initial bizzare reaction of like-dislike and acceptance-rejection, the child settles down mentally and gradually gets into the world of learning. The child as a learner in the learning process will gather certain characteristics. For example, extroversion-introversion, exhalted-depressive, high-middle-low achiever along with certain personality characteristics as may grow in him. Infact as Erikson (1959) had put it, there may be such states as, identity confusion and identity crisis till identity formation for the life cycle. Since, it will be too early for a child to grow an ultimate identity, it may be only the identity characteristics which may grow out of the stimulus-response dyad. The overt behavours of the child will be indicative of such characteristics. For example, healthy and energetic participation in group act...

grasping of responsibility for leadership, can be the positive characteristics. Whereas, afraid to play, unusual blaming of the playmate, sadism to the juniors by hitting or bullying them in unusual ways, can serve as negative characteristics.

Menon and Ojha (1987) in a trend report, have suggested learner's characteristics from environmental and psychopathological perspectives concentrating on groups of learners as exceptional, disabled and adolescents with regard to their intelligence, creativity, achievement motive, adjustment, sociometric status etc.

Apart from the above, characteristics of a child learner are also reflected through certain overt cognitive expositions (Roy, 1974). Level of learning of the child can be a source for such characteristics. For example :

Primary level (good for higher levels also)

1. Recall
2. Reproduce
3. Recognize
4. Identify
5. Verify

Middle level (good for higher levels also)

1. Give illustrations
2. Draw and locate information on maps, charts etc.
3. Effective presentation
4. Etiquetts and manners
5. Accuracy in observation
6. Preparation of simple models
7. Read literature
8. Collect materials
9. Visit places
10. See movies on the subject
11. Reasonable
12. General outlook
13. Give evidence
14. Handling of tools and apparatus
15. Socio-cultural activity

Higher levels

1. Compare and contrast
2. Establish any relationship
3. Analyse
4. Interpret
5. Select the relevant data, facts and information
6. Determine adequecy of data etc.

7. Right rationale
8. Hypothesize
9. Infer and reach at a conclusion
10. Validation
11. Prediction
12. Write articles
13. Active participation
14. Develop museums
15. Organizing capacity
16. Discuss and debate
17. Listening capacity
18. Develop creative outlook.

All such characteristics can also be considered as parts of the total personality development of the child learner. These ways involve habit formation and finding out the effective ways of better learning and higher academic achievement.

3. Learning in Schools

3.1 Developmental aspects :

It is generally observed that formal schooling mainly tends to develop verbal-numerical capacities. These include reading and writing abilities with knowledge of simple arithmatic. Verbal communication skills with adequate emphasis on grammatically correct sentences and pronounciations, lesser use of sort or gesture language, rote learning and memorization of poems, songs, arithmetic tables etc. are given full emphasis.

Garrison (1964) had observed that learning in schools can be based upon the following axioms :

1. The child, as a total being, is the central factor in any elementary school programme. His presence in school furnishes the sound basis for an educational programme.

2. Learning at school cannot be divorced from learning at home and the community.

3. Learning activities at school should concentrate on behaviour change that can best be produced through experiences in a school environment.

4. Learning in school should be most concerned with those behaviour changes that are in direction of the desired goals of education.

In view of the above, it can be observed that from the beginning, learning in schools starts giving emphasis on the following developments :

1. Cognitive development of the child

The child should be able to :

1.1 Discriminate

1.2 Categorise

1.3 Assimilate

1.4 Utilize the information obtained through teaching of the subjects.

2. Psychological development

To make the child :

2.1 Aware

2.2 Alert

2.3 Active

2.4 Excited

2.5 Motivated

3. Scientific attitude development

3.1 Observation

3.2 Experiment

3.3 Data collection and analysis

3.4 Inference

4. Personal development

4.1 Interdependence (e.g., between human beings, plants and animals)

4.2 Conservation (e.g., of plants and animals)

4.3 Take care (e.g., of personal health and hygi...

5. Social development

The child should be socially developed in the direct... of good family member, student, creative work with proper knowledge of good citizenship of his country.

Child psychologists have classified the development aspects into various other specific areas also for further detailed knowledge. But, the main purpose of sending the child to the schools is to develop in him the reading, writing, arithmatic and communication skills from the elementary stages to the higher and complecated l... It is here that learning in the schools has its own and exclusive importance.

3.2 Learning to learn

Learning has always been considered as a life-l... process. As a result, the concept of life-long educ... has been advocated. Lengrand (1970) had initiated criticisms against the formal school struct...res and outputs as rigid ones as these have given emphasis on youth only. It became a necessity that the inner stat... and integrity is increased so that the eros in an indi... is constantly stimulated for a socially useful and cre... living.

The Gestalt theory of insight learning was the first step in this direction. As a result, the learner was put to a self-corrective device through self-assessment, feedback and change triad. This has meant appropriate self-managment by using learning as a therapy through self-knowledge. Information feeding, establishment of effective communication channels and methods, are the ways and means through which effective ego-functioning can be initiated. This process involves increase in ego-strength and proper defence mechanisms.

It is, however, essential to know that the methods of learning like whole-part, rote, gesture, silent reading, sensory learning etc. are also quite important. At the early stages, the children require guided learning through one to one teaching. Involvement of learning and teaching aids like books, charts, films etc. are necessary. The process starts with the learning of simple literacy and numeracy. Gradually as the capacity of the learner will increase, so will be the increase in his knowledge about how to use the learning aids more effectively. As a result, this will become the essential step as learning to learn. A cumulative increase in the knowledge about such steps becomes learning to learn further.

Vasilyuk (1988) had considered learning as gathering experience for further learning to deal with critical situations like stress, frustration, conflict and crisis. These again form parts of egofunctioning to overcome psychological problems. The attempt however is to achieve stabilization of the learning process without much of learning process loss. Psychological processes like mental topography, dynamics and economy (Freud, 1957) become of useful consideration in the simultaneous and successive steps in the process of learning to learn. For example, the learner will prefer to be aware of the past learning, alert about it's context-content and active about it's use and reuse. As a result, learning becomes more effective.

3.3 Factors affecting school learning

Learning is associated with forgetting as well. As a result, it is necessary to know the factors affecting school learning from the points of view of retention, remember, recall and reproduce functions. Hilgard (1956) had enumerated a few factors. They are (1) Ability or Capacity (2) Motivation (3) Purpose or goals (4) Regards or effect (5) Practice (6) Forgetting (7) Transfer of training.

Roy (1974), compared TV teaching with classroom teaching with respect to their cognitive effects. The study was undertaken through a 2 x 2 factorial model having TV-non TV teaching as two levels of are variable and discussion - no discussion as two levels of the other variable. In all thirty-eight cognitive effects spread over four major areas of discrimination, categorization, assimilation and utilization aspects were studied.

Major observations were :

1) TV and non-TV teaching differ significantly
2) Discussion and no discussion at the end of teaching differ significantly
3) TV and non-TV teaching followed by either discussion or no discussion differ significantly
4) Whether TV or non-TV teaching, if the same is followed by a discussion, it produces better results.

Apart from the above, large number of studies are available to show the teacher influence in the form of teacher behaviour and its impact upon students classroom learning (Buch, 1987). It has been demonstrated in two studies by Roy (1970, 1972) that teacher behaviour not only can be changed but also in the direction which is helpful for higher learning output by the students. Roy (1970) had found out the following twenty classroom teacher behaviours as of utmost importance:

1) Enjoy funny remarks by pupils
2) Praises what pupil say in class discussion
3) Tells pupils about some interesting thing to read
4) Influencing pupils towards his/her own orientation
5) Suggests to pupils new and helpful ways of studying
6) Talks with pupils after school about ideas the pupils had
7) Asks small goups of pupils to study something together
8) Shows pupils how to look up an answer when the pupils cannot find it themselves
9) Asks the pupils what they would like to study in tomorrow's lesson
10) Acts disappointed when pupils get something wrong
11) Asks the class what they think of something a pupil had said
12) Modifying his/her attraction toward the pupils, i.e., liking them less
13) Supports the lesson with examples from day to day life
14) Cordially welcomes any newcomer to the class
15) Cares friendship among all the students
16) Behaves equally with every student
17) Takes up seriously and does everything possible to restore the efficiency of the students.

18) Insists upon the completion of the home tasks.

19) Keeps in touch with the progressive literature not only in the subject of specialization but on others as well.

20) Helps the pupils to go up by themselves.

Several studies reported in Buch (1991, had shown uses of Flanders interaction analysis Categories (Flanders, 1970) to study teacher effectiveness and classroom teacher - pupil interaction as important factors influencing school learning. In fact, FIAC is one of the several methods evolved during the late sixties for studying classroom interaction.

Roy (1974) had shown the effects of teacher behaviour patterns on teaching different teaching materials. The study had used FIAC on thirty two male and eleven female school teachers teaching general science, social studies, mathematics and language. Through a study of the various measures out of the FIAC, it was found that male teachers were teaching general science and social studies better than female teachers, who were teaching mathematics and language better than the male teachers.

It was also found that lecturing, direct influence and lesser student participation were predominant in case of general science and social studies group of subjects. FIAC also gave pictures about the classroom climate whether it was authoritarian or democratic and how they were affecting the school learning.

School learning, although it is mainly confined structurally to about six hours of stay in a school, but can also be extended to the later influences of home and peers. Parents attitude towards education, peer's level of achievement motivation and actual achievement also, influence pupils' school learning. Infacts, pupil's observation of his learning atmosphere around him, gives him the right kind of feedback. Such a step may change his attitude toward his own learning levels. These have been discussed by Roy (1973, in his paper on teacher-pupil relationship, wherein effective school learning was related to the said relationship.

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4. Teaching Methods :

Teaching has always been considered as an art. The art of teaching and the science of learning has created a parallelogram around the teaching-learning process. Modern teaching methods have been under consideration since the inception of the need for teacher training or teacher education. For example, the following methods have their own characteristics:

4.1 Traditional methods

1. The Dalton Plan

Miss Helen Parkhurst introduced this system in Dalton (Massachussets - USA) in 1920. She had thought

of the school as a sociological laboratory where the pupils themselves are the experimenters. Community conditions will prevail in the school as they prevail in life itself. The two fundamental principles of the plan are freedom and cooperation.

2. The project method :

The objective is to promote motivation, thinking, habit formation and action for completion of a project (task) in its natural setting or social environment.

3. The Heuristic method :

The method involves the pupil as that of a discoverer and not that of a passive receiver of knowledge. Here teacher will suggest the best ways out to solve a problem and leaving the plan to workout the same to the pupil themselves.

Specifically speaking, for example for mathematics teaching the following methods are considered as of traditional value :

1) The synthetic - analytic method
2) The inductive - deductive method
3) The dogmatic - psychological method
4) The lecture - laboratory method

All the above mentioned methods are not exclusive but may be required at different phases of presentation of any teaching material. Mookerjee (1964) had discussed many such individual approaches by great educators like Rousseau, Herbart, Froebel, Dewey, Montessori, Tagore, Gandhi and others. Each one of them had advocated their own ideas about teaching methods for students of various levels starting from nursery, K.G. to the highest levels.

4.2 Recent developments :

During recent times, teaching methods have been linked to effective teaching models. Joyce, Weil and Showers (1992) is a good source for know about them. Initially the models are described, in terms of concepts. They are :

1. Syntax, which means sequence of activities called as phases in teaching. These can be presented in the following way through two models.

	Phase I	Phase II	Phase III
Model I	Presentation of Concept	Presentation of data	Relating data to concept
Model II	Presentation of data	Development of categories by the students	Identification and naming of concepts

2. The Social System :

In this part teacher-pupil relationship, the norms, roles and activities are important.

3. Principles of Reaction :

Here the teacher is provided with the appropria rules to tune into the student and select appropriat responses to what the student does.

4. Support System :

This includes not only text books (learning aids films, self-instructional systems, travel arrangement laboratories (internal and play fields).

5. Instructional and Nurturant Effects :

The teacher must balance instructional efficiency with the predictable nurturant effects, e.g., a teac might employ a particular method to bring up the passive and low or middle level academic achievers to higher levels.

Describing the models from the first four (1 to requirements several families of models were discus For example.

1. The Social Family :

1.1 Group investigation models

This model includes respect and dignity of all and commitment to pluralism, independence as a learner, committment to social inquiry, interpersonal warmth and affiliation (all as instructional), constructionist view of knowledge, disciplined inquiry effective group process and governance (as nurturant).

1.2 Role-playing model :

This model includes analysis of personal values and behaviour, strategies for solving interpersonal problems, empathy (all as instructional) and facts about social problems and values, comfort in expressing opinions (all as nurturant).

1.3 Jurisprudential inquiry model :

This model includes framework for analyzing social issues, ability to assume role of the other, competence in social dialogue (all as instructional) and empathy/pluralism, facts about social problems, capacity for social involvement and desire for social action (all as nurturant).

2. The Information Processing Family :

2.1 Inductive Thinking model :

This model includes concept formation process, specific concepts (all as instructional) and attenti to logic, sensitivity to language, awareness of natur of knowledge (all as nurturant).

2.2 Concept attainment model :

This model includes nature of concepts, improved concept-building strategies, specific con inductive reasoning (all as instructional) and awareness of alternative perspectives, tolerance of ambiguity (but appreciation of logic), sensitivity logical reasoning in communication (all as nurturant).

2.3 Memory model :

This model includes mastery of facts and ideas, a system for memorizing, attending facilities (all as instructional) and a sense of intellectual power, creative attitudes and capacities (all as nurturant).

2.4 Advance organizer model :

This model includes conceptual structures, meaningful assimilation of information and ideas (all as instructional) and interest in inquiry, habits of precise thinking (all as nurturant).

2.5 Inquiry training model :

This model includes scientific process, strategies for creative inquiry (all as instructional) and spirit of creativity, independence of autonomy in learning, tolerance of ambiguity, tentative nature of knowledge (all as nurturant).

2.6 Synectics model :

This model includes general creative capacity, creative capacity in subject domain (all as instructional) and achievement in subject domain, group cohesion and productivity (all as nurturant).

3. The personal Family :

3.1 Non-directive teaching model :

This model includes personal awareness, self-development, variety of social and academic goals (all as nurturant). Also included are self-concept and the state of growth (understanding and potential).

4. The Behavioural Systems Family :

4.1 Direct instruction model :

This model includes mastery of academic content and skills, student motivation, self-pacing ability (all as instructional) and self-esteem (as nurturant).

4.2 Contingency management model :

This model includes academic skills and knowledge, social skills/behaviour, self management skills, emotional responses, personal skills/ behaviour (all as instructional)

4.3 Self control model

This model includes increase targets behaviour and decrease maladaptive behaviour, (all as instructional) and sense of control over one-self and one's environment, self-esteem and confidence (all as nurturant) and method for establishing self-control, behavioural point of view awareness of environment (all as both instructional and nurturant).

4.4 Simulation model :

This model includes critical thinking and decision making, empathy, awareness of the role of chances, facing consequences, sense of effectiveness (all as nurturant) and concepts/skills, knowledge of political and economic systems (all as both instructional and nurturant).

It may be noted that, all models have their own merits and demerits. For example, the personal family is criticized as soft, the social family for relying on social skills of the immature, the information-processing family for being academic and the behavioural systems family for presumably being impersonal and hard-edged. But, then the problem however, remains to save intelligence of the pupils from the effect of poorly designed instruction. All models for designing the instruction, however, lead toward the teacher-pupil interaction in the classrim. Thus any teacher will have to findout and adjust the model with the actual subject and pupil requirements.

Roy (1980) had advocated the concept of teaching laboratory cum-clinic (TLC) for improvement in the teaching methods and teacher behaviour of the teachers. The feedback principle was suggested for changing the teacher behaviour through Teacher's Peer Rating (TPR), Outside Observation (OO) by FIAC, Pupil's Observation (PO) vis-a-vis Teacher's Self Rating (TSR). Methods like micro-teaching and simulation technique, for feedback-recycle-reteach plan by having a problem orientation, were suggested in the paper.

5. Types of schools and school climate

5.1 Formal and informal types :

On types of schools, one can think of as many types of schools as there are philosophical ideas and/or in combination with the classifications allowed by the respective governments. The oldest among them can be the tols, pathsalas, gharanas, ashrams etc. were the schooling was for the princes mainly but at times for the scholarly other students as well.

During earlier parts of the nineteenth century, when newer thninkings on the Indian education scene were being promulgated, it was found that along with vernacular schools, madrasas etc. anglo-arabic, anglo vernacular schools also started coming up at the intiative of the administrators. It was also attempted to keep the traditional culture alive by promoting interests of the Sanskrit studies through special schools.

Later developments had seen evolution of the pre-primary (K.G., nursery), primary (lower, middle, higher), secondary and higher secondary types of schools. Apart from the pre-primary steps, others are considered as parts of a formal structure based upon the 10+2+3 categorization. Age-group pedagogical picture of the formal system has determind either 5(+) or 6(+) as the

chronological age, when the child can enter the formal schooling system at class or standard I. This however, is a matter of both central and state policy(either jointly or seperately)regarding the minimum age requirement for entry into class I.

Running parallel to the formal structure is the informal structure advocated in the following ways :

0-3 age group	: Anganwadi, Balwadi, Creche
3-6 age group	: 1) Early childhood education centres run under ICDS programme as well as by voluntary organizations.
	2) This age group is considered as pre-primary age group for pre-primary classes as K.G., nursery etc. at times having sub-stages in them.
6-14 age group	: Non-formal education, as a part of the programme of universalization of elementary education.
14-36 age group	: Adult education (inclusive of worker's education, women's education etc.)
36- above age group	: Life-long education.

Students willing to appear in the delta level examinations like secondary examination specially, can take help of the open school system extended to open university.

The Indian scene has a mixed picture with regard to both types of schools as well as school climate. Education is a joint sector project where states and the centre can have their own types of schools, boards, curriculum, syllabus for holding the examination. At present three such boards are very clearly working in the Indian scene. They are :

1. Central Board of Secondary Education (CBSE)
2. Indian Council of School Education (ICSE)
3. State/Local Boards.

Depending upon several considerations different types of schools are available. For example :

1) Private unaided
2) Private aided
3) Kendriya Vidyalaya
4) Jawahar Navodaya Vidyalaya
5) Society or trust governed schools under minority institutions act.
6) Uni-sex or co-education schools
7) Municipal schools
8) Local administration schools
9) Residential schools
10) Vernacular/English medium schools
11) Open school.

The above list does not include such schools as may be considered under anganwadi, balwadi, creche, pre-primary (K.G., Nursery), ECEC, N.F.E. Centres, adult education centres, which constitute an informal parallel system of schooling for education of the school leavers at certain age or the other.

5.2 School climate :

Types of schools have some relationship with the school climate. Dewey (1938) was the first to speak about learner's environment and school atmosphere. Argyris (1958) thought of organisational climate as a result of interaction among persons in an organization. Halpin act Croft (1963) stated that what personality is to the individual, so is organizational climate to the organization. In India Mubayi and Sharma (1973) used the Organization Climate Description Questionnaire(OCDQ) by Halpin and Croft (1963) to study organization climate of tribal schools. The OCDQ had eight sub-tests for measuring disengagement, hindrance, esprit, intimacy, aloofness, production emphasis, thrust and consideration. The first four sub-tests were meant to study group behaviour and the remaining four for leadership behaviour. These were matched against six types of school climates. They are open, autonomous, controlled, familiar, paternal and closed climates. The study hypothesized that the open school environment is more congenial for healthier developments of the school family members.

Chopra (1982) had also undertaken a doctoral work to study the organizational climate of schools in relation to job satisfaction of teachers and students' achievements. Among eight findings the two more important findings were that students' achievement was not significantly different in different climate type schools and there was no significant relationship between theachers' job satisfaction and student achievement.

5.3 The Effect of downward extension of primary education

Downward extension of primary education can be considered as either pre-primary or pre-school education which may mean the same structure. It has already been discussed earlier that the ideas of anganwadi, balwadi, creche and early childhood education centres are considered as downward extension of primary education. In some other ways the stages are termed also as K.G., nursery, preparatory stages also, having at times sub-stages in them also. However, all such downward extensions have the same purpose, i.e., to prepare the child for the formal entry into the class I, i.e., the first step in the primary education.

It has been noticed that the downward extension of primary education, has become quite helpful for preparation of the child for the class I standard.

The following aspects are generally covered :

1. Health, hygine and play
   - 1.1 personal cleanliness
   - 1.2 environmental cleanliness
   - 1.3 action song, drill, march past etc.
2. Cultural and educational activities
   - 2.1 language learning
   - 2.2 digital learning
   - 2.3 oral hearing and repeating
   - 2.4 correct pronounciation
   - 2.5 dance, drama, recitation, songs, story telling etc.
3. Creativity
   - 3.1 clay work, modelling
   - 3.2 sand work, design
   - 3.3 drawing and sculpture
   - 3.4 paper cutting, pasting, modelling
   - 3.5 design and decoration.

4. Environmental awareness and sense of citizenship

4.1 familiarity with names and relations within the family

4.2 environment observation

4.3 rural or urban awareness

4.4 educational tour.

In view of such activities performed at the pre-primary stages, a good amount of preparation is offered to the child for entry into the formal class I standard. Such well preparedness help the child to effectively face the cognitive, conative and affective requirements of class I. Such psychological preparedness is always helpful to overcome school phobia and associated adjustment problems, through tolerance, compromise, understanding etc.

The NPE (1986) has also given full emphasis on such a model although officials recognition to the pre-school or pre-primary education is very much awaited in different states of the country. Proper school building, play ground, garden, fencing, materials for indoor and outdoor activities etc. are not always available everywhere. This is specially so at the rural sector than the urban sector. In India the majority of the child population, is lying in the rural sector. As such, downward extension of primary education and its good effects needs to be effected as more abundant in such areas. It is here, that the systems advocated by Montessory, Froebel etc. will have a better tryout than elsewhere.

6. Achievement Versus Attainment

6.1 Conceptual analysis

Achievement and attainment are macro and micro concepts on the continium for goal reaching behaviour. The differentiation is made on the grounds of long term goal achievement and short term goal attainment. While, according to achievement motivation theorists (Atkinson, 1958) both long and short term goal achievement and attainment involve imagery, goal setting behaviour, instructional activities, overcoming blocks both within and outside the individual, risk taking behaviour, role play etc. The question of aptitude, ability and skill also need active consideration.

In the school learning situation, both achievement and attainment are understood in terms of academic achievement only. For example, the grade, percentage of marks, position in the class are but some of the crucial aspects. These are again found out through oral and written examinations or other evaluation systems which are based mainly on digital or numerical analysis. For convenience, a threetier system of high, middle and low levels are generally used to classify the academic achievers in macro ways. It has also been observed that high and low level achievers are proportionately lower,

than the middle level achievers. As a result, educationists have been trying to improve the lot of the middle and low achievers through uses of psychological techniques (like, positive reinforcement, feedback etc.) and trying to keep the position and quantum of high achievers as much unchanged as possible. Such economic considerations like wastage and stagnation, cost benefit analysis, problem of early school leavers (dropouts), have subjected the school learning situation for further review from the systems approach and specially from the point of view of process loss if any. Investment in education and its short and long term benefits or turnouts have moved the educational researchers, planners and administrators to rethink about the problem. For example, through the several steps like no-detention policy in primary stages, grading or no-pass no-fail system in place of one-dimensional either passor fail system, review of answer scripts etc., have liberalized the examination tension and phobia upto a considerable extent. But the picture at the delta level examination like class X and XII have made the situation more complicated as admission to a particular higher institution or the other or to a economically paying subject (physics, chemistry, economics etc.) cannot be made a success unless very high level percentage of marks are obtained. It is here that the concepts of over and under achievement score an important ground.

6.2 Patterns of achievement
(over and under achievers)

Here, over and under achievement need to be considered from the point of view of academic achiev or learning outcome only of the pupils in any teachi learning situation like school. Over and under achievement is a polarised view of the degree of achievement based upon digital or numerical analysi of the examination results. Statistically they may represent the +3% and -3% ends of the normal probab curve. However, these cutoff lines are not so sacrosanct and they can be shifted to places for fre cut-off lines to suit the achieving population struct and number.

Such levels of achievements and their achievers depend upon their home-school-environment triadic interactions and effects. The attitude of the paren toward education, socio-economic status, self-concep value, attitude are some of the important variables. Similarly the school climate, teacher attitude, teaching behaviour, learning aid etc., are also important. For environment, the roles of the peers, clubs, socialization can be of equal importance. It is however noticed that almost all children require

adequate amount of intellectual and mental feed for their achievement orientation. This is specially required, since academic achievement or the learning outcome is mainly regarded as a product of cognitive functions. The role of the affective functions cannot be disregarded also. It may involve emotional resistance through displaced aggression or hostility against one or the other and connected as subjective problems. I.Q. of such over and underachievers may not differ very largely excepting from the level of average ones to downwards till pathological cases of mental retardation. However, patterns of achievement may be short or long term, situational, general or specific. The under achievers may become at times intellectual dwarfs and over achievers as show boys. Both of these, however, drew attention of others as of low or high achievement motivation.

However, it is significant that cognitive capacities related to the acquiring of verbal-numerical capacities are mainly influenced by the family experiences and the value dilema therein if any. Social or cultural deprivations may also create problems. As such, educational programmes of value for development of child's repertoire of cognitive skills may be framed from ecological and societal needs.

6.3 Reinforcement and joy of learning

Learning theories have shown concern on the principle of reinforcement from the points of view of (a) increasing the probability of evoking a particular response (b) development of adequate motivation for learning activities. However, reinforcements can be used only after evaluation and feedback of some degree. As such, reinforcements have been seen from the following points of view :

1. Positive and negative reinforcement (reward and punishment)
2. Material (or token) reinforcement like candy, money etc.
3. Ideal or social reinforcement like praise, knowledge about the correctness of any answer
4. Immediate and frequent reinforcement
5. Strong and weak reinforcement
6. Contingent reinforcement (reward for performing a given behaviour)
7. Partial reinforcement (elimination by socialization or desensetization of maladaptive behaviour like begging by young children).

Many of the behaviour problems of school going children can be improved through the use of varieties of reinforcements. Among these, social reinforcement is the most used process while others are either not applicable or cannot be used adequately. However,

first step is to findout the problem behaviours wh
can be subjected to change. Some of them are :

a. creating noise (e.g., rattle papers, atte
drawing behavior, bored)

b. loud talking (e.g., hostile, drops things,
speakout etc.)

c. disrespectful (e.g., [illegible] listen,
hyperactive, sleepy etc.)

d. on the go (e.g., feels inadequate,
disinterested etc.)

The teacher in the classroom may have to find
conditional behaviour replacements. For example h
may use verbal orders as

[illegible]

[illegible] interrupting

[illegible]

1. [illegible] papers

2. [illegible]

The teacher has to understand the importance of the order as stimulus, whether it is acceptable or not. There has to be sense of time, place and person. In continuation, certain social reinforcements are used either as a gesture (looking at, nodding, similing etc.) or as a verbal language (yes, very g right etc.)

Roy and Kumar (1978) had studied verbal appreciation social reinforcement) by class teachers for improvement in cl tests, devoting more time in studies, showing better performanc in academic achievements. It was found that the middle range achievers benefitted most from the social reinforcements, and within this group, those students who were reinforced once or twice gained more than those who were reinforced in the case of high achieving students.

Findngs of the study suggested that, teachers can motiv their students to achieve more in their studies if the social reinforcement technique is applied in the normal classroom setting. Students of middle (average) level achievement, gain most from this technique. Next in rank order, came the higher group followed by the lower group.

Apart from social reinforcement, uses of token reinforcements have shown their importance. For example, following the emission of desired behavior, back-up reinforcers like candy, soft drink, toys, colur pencils, check marks in note books etc. can be used.

Reinforcement itself is a stimulant and finds a place in the teaching-learning process as a producer of the joy of learning. Success only and not failure, can bring joy. An initial success can always be joyful to move for the next step and so on. This can be as one step at a time with cumulative effect. As we know of the probable plateau of the learning curve where there seem to be an apparent rest period, but can be seen therein as void any joy of learning. This can be attributed to a minimized rate of interest and attention. It is here that reinforcement has positive role to play for increasing interest and attention of the learner and ultimately to get the joy of learning.

Some other aspects :

7. Some other aspects:

7.1 Effects of Home Work and Tutions

Two very important aspects of school learning are insistence upon home work and tutions as parts of remedial teaching. Home work primarily is a study-cum-problem solving activity when the child is in home. Tutions, on the otherhand, is another learning situation where micro-level attention is given in an one-to-one teacher-pupil interaction. Both the aspects have their own merits and demerits.

Roy (1976) in his study on the aspects of the load of home work in schools, had shown its influences on the academic achievement of the pupils. The major findings were :

1. Load of home work was generally higher in private schools in urban areas.

2. About 65.2% of the urban students were taking help in doing home work from their parents and tutors.

3. High achieving students tend to complete home w. by any means. Whereas, middle and low achiever. showed gradual disinterest in home work.

4. Private tution were undertaken by urban middle range achievers for their studies which include completion of home work.

5. Some students always gain out of home work due t its good aspects and others fail to utilize the s to become low achievers.

It is observed from the findings that, home work and tution are very much closely related to each other. These are due to both good and bad aspects of home work. The good aspects include keeping the children busy in home through studies, improvement in subject content, knowledge, revision and writing. The bad aspects are making the child less creative, false illusion and making them worried and sometimes ending up in school phobia.

In view of the above, it was further foundout that home work could be waived atleast for the lower primary classes (I an.. and kept at the workable levels at the midole and upper primary levels onwards. Influence of tution has been considered also from its negative aspects which would increase academic dependency motive upon the private tutor. Also, tution is likely to divide the tream of thinking and learning among the pupils in different

and heterogeneous directions. Thus divergent tendencies are likely to create more of confusion and conflict in the learning process. Which teacher is to be given more importance and to be followed (the school teacher or the tutor in home) become the crucial question. The pupil may thus get into ambivalence for any solution, if not end up in the learning process loss instead of getting the better aspects of such remedial teaching meth-

7.2 Monitoring and Evaluation

Monitoring and evaluation go hand in hand and it is their coordinated venture that keeps the teaching-le- activities effectively coordinated. Rao (1986) had obs that, "the primary purpose of evaluation is to monitor t students' learning - to constitute an objective check on of his progress and ultimate achievement so that suitable remedial measures may be instituted, if necessary" (.2). Views expressed by Bloom (1971), Lewis (1976) etc. are already quite well known. For example, ideas regarding formative and summative evaluation for the on-going and n

product are already in practive. However, the former is treated as assessment and the latter as a judgment.

In view of the above and subsequent developments in these areas, the National Policy on Education (1986) had emphasized that for qualitative improvement in education and specially the teaching-learning process, it is necessary to introduce continuous comprehensive evaluation (CCE). The CCE should cover both scholastic and non-scholastic aspects in the schools. In a set of recommendations by NCERT (1991) on CCE it was stated that CCE should include :

1. Assessment of scholastic achievement in curricular areas including Work Experience, Physical, Health and Art Education.

2. Periodic assessments should be done throughout the year.

3. The following are the suggested inputs for assessments and their weightages for scholastic areas :

   a) Written Examination-Closed book 50%
   b) Open-book Examination 20%
   c) Project/Practical work/assignments 20%
   d) Oral Examination 10%

   The weightages may be amended as per state requirements.

4. Personal and social qualities like leadership, discipline, cooperation, civic sense, consciousness of rights and duties, cleanliness, emotional stability, industry and initiative, etc. should be assessed. Each pupil should be evaluated on any four of the personal and social qualities.

5. Assessment of co-curricular areas may include individual and group activities as well as social, literary, cultural and other activities which may help in the total development of the personality of the learner. Main objective should be to find out the interests of pupils and help them to develop at their pace and in the directions they feel instinctively inclined. Each pupil may have an opportunity atleast to pursue one interest.

6. Provision should be made for self-appraisal on the part of the learner.

The CCE may be implemented upto class IX to beging with. A further objective is to reduce the pre-dominance of external examination in the school system.

The importance of the CCE is now increasing as it has got an overall importance. But coming to the relathions relationship between curriculum and its relationship with other assessment or evaluation, certain other conditions also need some attention.

For example :

1. Enhancing the desire to learn more
2. Availability of free books and related or other literature
3. Opportunity to meet and discuss with others
4. Obtain field experience
5. Accuracy of the information received
6. Adequacy of the level of learning material
7. Teaching and group discussion followed by oral and written answers by the students
8. Feeling the usefulness of day to day learning.

Such points as stated above, also give rise to the question of having as well a programme of Continuous Curriculum Curriculum Renewal (CCR). The CCR will run parallel with the Continuous Comprehensive Evaluation (CCE). It is now clear that CCR and CCE become simultaneous and successive conditions for stimulating each others existential value. The CCR and CCE will run parallel to each other as a supporting device to fulfil the aspects of monitoring the students learning and learning outcome. Enhancement of effectiveness of the teaching-learning process and school learning as a whole, can be more ascertained in such ways also.

9. Epilogue :

The formal school as a place for learning has its own importance, not only for learning the digital and linguistic parts, but to learn about ethics, discipline, values and morality also. Schooling is also necessary for training the mind of the child to know about various aspects of life and living so that all these generate a kind of self management for his own survival, maintenance and growth in association with others.

The school learning is supposed to prepare the child to enter the world of work with a socially useful and creative purpose. The goal however remains the same, i.e., to produce skilled and self-actualizing youth. Education and learning work as transformation processes. The objective is to prepare the child to be aware, alert and active for collective gain, optimization of the socially acceptable values like love for the country, dignity of labour etc.

Certain very limited aspects of school learning have been discussed. These are mostly research based, but the thinking cannot stop here. What is important is to create and have social, educational and political will. For these, further research, enrichment programmes,

inservice training, workshops, seminars are all necessary to reach the gainful knowledge to all concerned with the teaching-learning process. The implications can be visible at the beginning but more cognigible at the end having far reaching consequences.

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